



SUBARU

Industrial Power Products

PARTS MANUAL

Model

PKX401T

PUMP

PUB-EP
Rev. 0813

Robin America, Inc.

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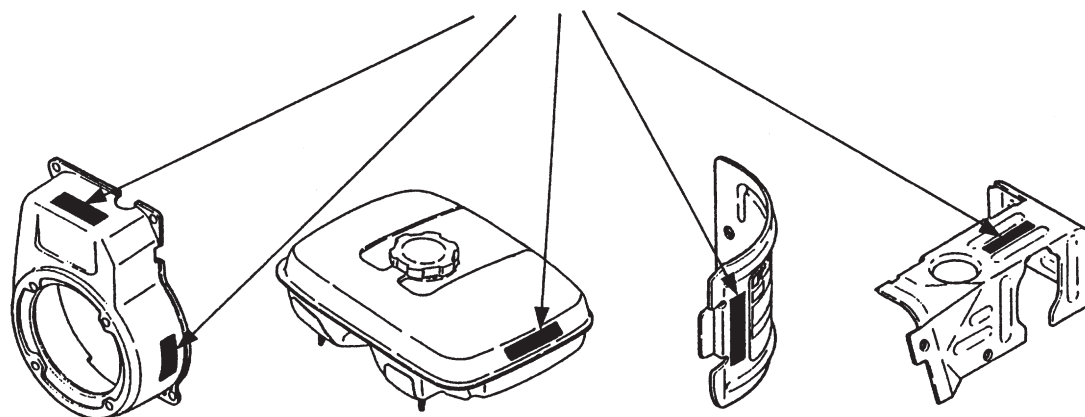
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HOW TO USE THIS MANUAL

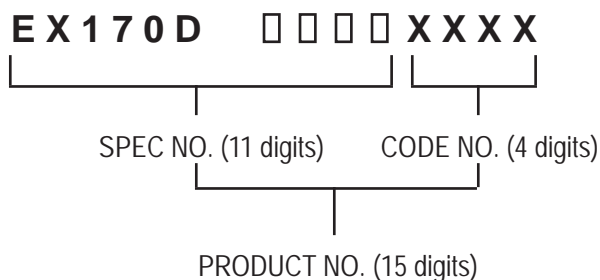
Robin engines are identified by MODEL, SPECIFICATION, and CODE NUMBER. For each model there may be many different versions called specifications. Each specification will be unique in some way. The difference may only be the paint color or it may have a different type of PTO or some other significant difference.

In order to identify the correct service part number, it is important to confirm the specification and code numbers for your engine. The specification and code number together are known as the PRODUCT NUMBER.

All Robin 4 cycle engines have a Product Number label similar to the label illustrated below.



The Product Number Label has a 15 digit alphanumeric string that consists of the SPECIFICATION (SPEC) number (11 digits) and the CODE number (4 digits). Please note the illustration below:



MANUAL LAYOUT

1— SECTION 6 FUEL GROUP

2— FIG. 600

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20,27

31

DETAIL A

1— SECTION 6 FUEL GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	267-60103-01	FUEL TANK CP	1	YD, YS TYPE, BLACK		600
	267-60101-01	FUEL TANK CP	1	YELLOW		600
27	073-20039-00	LABEL, WARNING	1	YD, YS TYPE		600
30	043-04300-15	FUEL TANK CAP CP	1			600
31	267-95201-03	LABEL, EMISSION	1	YD, YS TYPE		600
40	064-13600-10	FUEL FILTER	1			600
50	064-20021-01	FUEL STRAINER AY	1			600
-1	064-20002-20	FILTER	1			600
-2	064-20002-30	GASKET	1			600
-3	064-20019-10	CUP	1			600

1. SECTION NAME Parts are broadly classified according to their functions. Refer to the Group Index (table of contents) for respective section name.
2. FIG. No. The FIG. number indexes the reference and part number to the illustration. Figure numbers that vary only in the tens place (i.e.: 700 and 710) are in a group of the same section (i.e.: Electrical Device Group).
3. REF. No. The Reference number identifies the part illustration with the corresponding part number in the part list.
4. SUBASSEMBLY SUBASSEMBLY parts of part assembly are listed below the assembly part. The subassembly part reference number is indicated by the number led by "-" such as "-1", "-2".
5. PART NUMBER It is the number assigned for sales unit. Use the PART No. when making an order.
6. DESCRIPTION It is designation of the part.
7. QTY. Quantity of each part used for each product.
8. REMARKS This gives a distinctive feature and/or a supplementary comment for the type, the specification, and the part concerned. It also shows part number(s) interchangeable for the part.
9. FROM-TO This section shows the CODE No. to indicate the history of progress in which improved parts have been introduced in the product. The FROM-TO CODE No. helps to identify PART No. being employed in the product concerned. See the examples below:
 - The part is used in the product irrespective of CODE No.
 - 2101- The part is used in the products with CODE No. of 2101 and after this number.
 - 2100 The part is used in the products with CODE No. of 2100 and before this number.

GROUP INDEX

Group Name	Page
CRANKCASE GROUP	6
CRANKSHAFT GROUP	8
INTAKE and EXHAUST GROUP	10
GOVERNOR GROUP	18
COOLING and STARTING GROUP	22
FUEL, LUBRICANT GROUP	26
CARBURETOR GROUP	28
ELECTRIC DEVICE GROUP	32
ACCESSORY GROUP	38

INDEX OF DESCRIPTION SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AY	ASSEMBLY	P=	PITCH (in mm)
CP	COMPLETE	P.T.O. (PTO)	POWER TAKE OFF
EX	EXPORT (from Japan)	REF.	REFERENCE
FIG.	FIGURE	R.H. (RH)	RIGHT HAND SIDE
FR.	FRONT	RR.	REAR
"	INCH	STD.	STANDARD
INCL.	INCLUDE	SW	SWITCH
~L	LITER	T=	THICKNESS (in mm)
L=	LENGTH (in. mm)	UN	UNIT
L.H. (LH)	LEFT-HAND SIDE	U.S.	UNDER SIZE
MECH	MECHANICAL	~V	VOLTAGE
NO (NON)	NONE	~W	WATT
OPT	OPTIONAL	W/	WITH
O.S.	OVER SIZE	W/O	WITHOUT

FIG. 1 CRANKCASE GROUP

FIG. 100

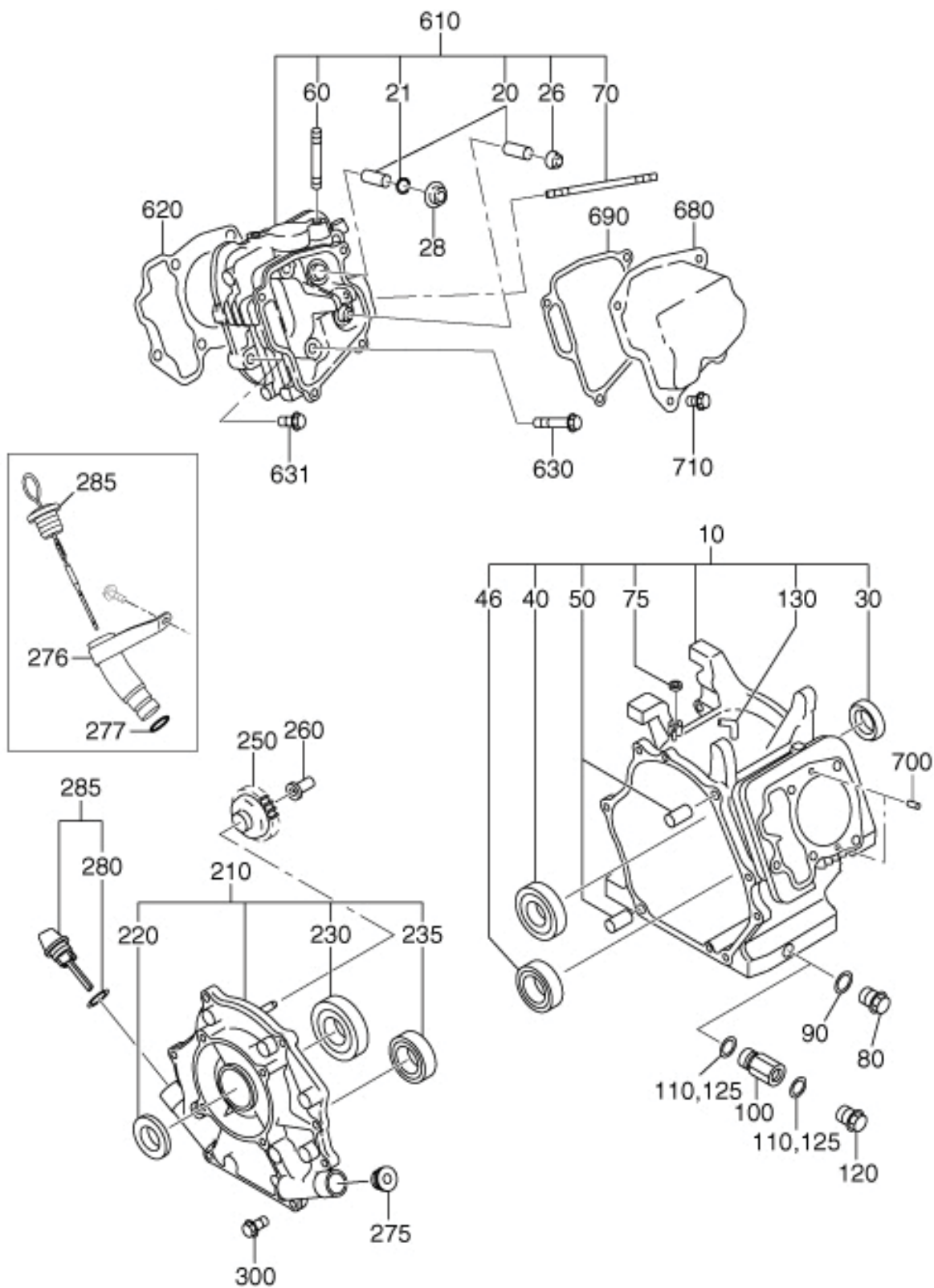


FIG. 1 CRANKCASE GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
10	20B-10102-41	CRANK CASE CP	1		-	100
20	20B-14202-03	VALVE GUIDE	2		-	100
21	056-51000-50	CLIP	1	10.7DX0.9D	-	100
26	132-11AA1-10	SEAL-EXH VALVE	1		-	100
28	263-35341-03	RETAINER PLATE	1	11DX17.3DX27DX4.7H	-	100
30	044-03500-91	OIL SEAL	1	35DX48DX8B	-	100
40	X60-03502-40	BALL BEARING	1		-	100
46	X60-01500-11	BALL BEARING	1	15DX35DX11B	-	100
50	277-15011-03	PIPE KNOCK	2	10.3DX8.5DX14L	-	100
60	010-50802-90	STUD	2	M8X1.25X30L	-	100
70	010-50604-40	STUD	2		-	100
75	044-00800-10	OIL SEAL	1	8DX14DX4B	-	100
80	040-11400-30	PLUG	2	M14X1.5X20DX12L	-	100
90	021-11400-20	GASKET	2	14.1DX19DX2.3T	-	100
210	20B-11001-21	MAINBEARING COVER CP	1		-	100
220	044-03500-91	OIL SEAL	1	35DX48DX8B	-	100
230	X60-03502-40	BALL BEARING	1		-	100
235	X60-01500-11	BALL BEARING	1	15DX35DX11B	-	100
250	20B-45003-11	GOVERNOR GEAR CP	1		-	100
260	277-41902-01	GOVERNOR SLEEVE CP	1		-	100
285	279-63601-30	OIL GAUGE AY	2		-	100
300	011-00803-40	FLANGE BOLT	8	M8X1.25X17DX38L	-	100
610	20B-13002-00	CYLINDER HEAD AY	1		-	100
620	20B-15001-33	GASKET(HEAD)	1	T=0.2	-	100
630	011-01000-40	FLANGE BOLT	4	M10X1.25X19DX75L	-	100
631	001-04083-50	FLANGE BOLT	2	M8X1.25X16DX35L	-	100
680	20B-15501-01	ROCKER COVER CP	1		-	100
690	20B-16001-03	GASKET(ROCKER COVER)	1	T=0.5	-	100
700	031-00600-10	DOWEL PIN	2	6DX14.8L	-	100
710	011-00600-20	FLANGE BOLT	4	M6X1.0X14DX12L	-	100
960	20B-99001-37	GASKET SET	1		-	100

FIG. 2 CRANKSHAFT GROUP

FIG. 200

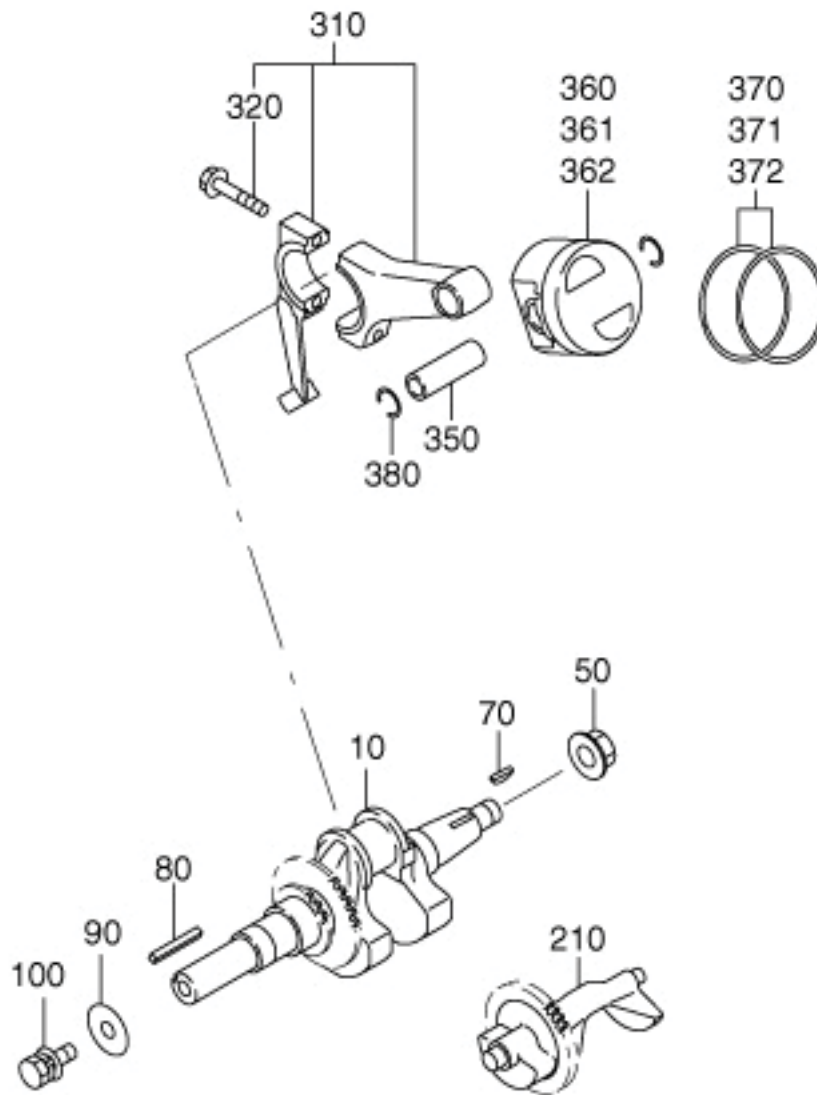


FIG. 2 CRANKSHAFT GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
10	20B-21001-21	CRANK SHAFT CP	1		-	200
50	018-01800-10	FLANGE NUT	1	M18X1.5X31DX14H	-	200
70	005-32054-01	WOODRUFF KEY	1	5BX7.5HX19D	-	200
210	22B-24101-03	BALANCER SHAFT	1		9284-	200
	20B-24101-03	BALANCER SHAFT	1		-9283	200
310	20B-22503-00	CONNECTING ROD AY	1		-	200
320	001-05084-00	FLANGE BOLT	2	M8X1.25X16DX40L	-	200
350	263-23301-33	PISTON PIN	1	21DX15DX64.2L	-	200
360	20B-23401-H3	PISTON	1	STD	-	200
361	20B-23403-H3	PISTON	1	0.25 O.S.	-	200
362	20B-23404-H3	PISTON	1	0.50 O.S.	-	200
370	20B-23501-07	PISTON RING SET	1	STD	-	200
371	20B-23502-07	PISTON RING SET	1	0.25 O.S.	-	200
372	20B-23503-07	PISTON RING SET	1	0.50 O.S.	-	200
380	056-52100-20	CLIP	2	22.1DX1.4D	-	200

FIG. 3 INTAKE and EXHAUST GROUP

FIG. 300

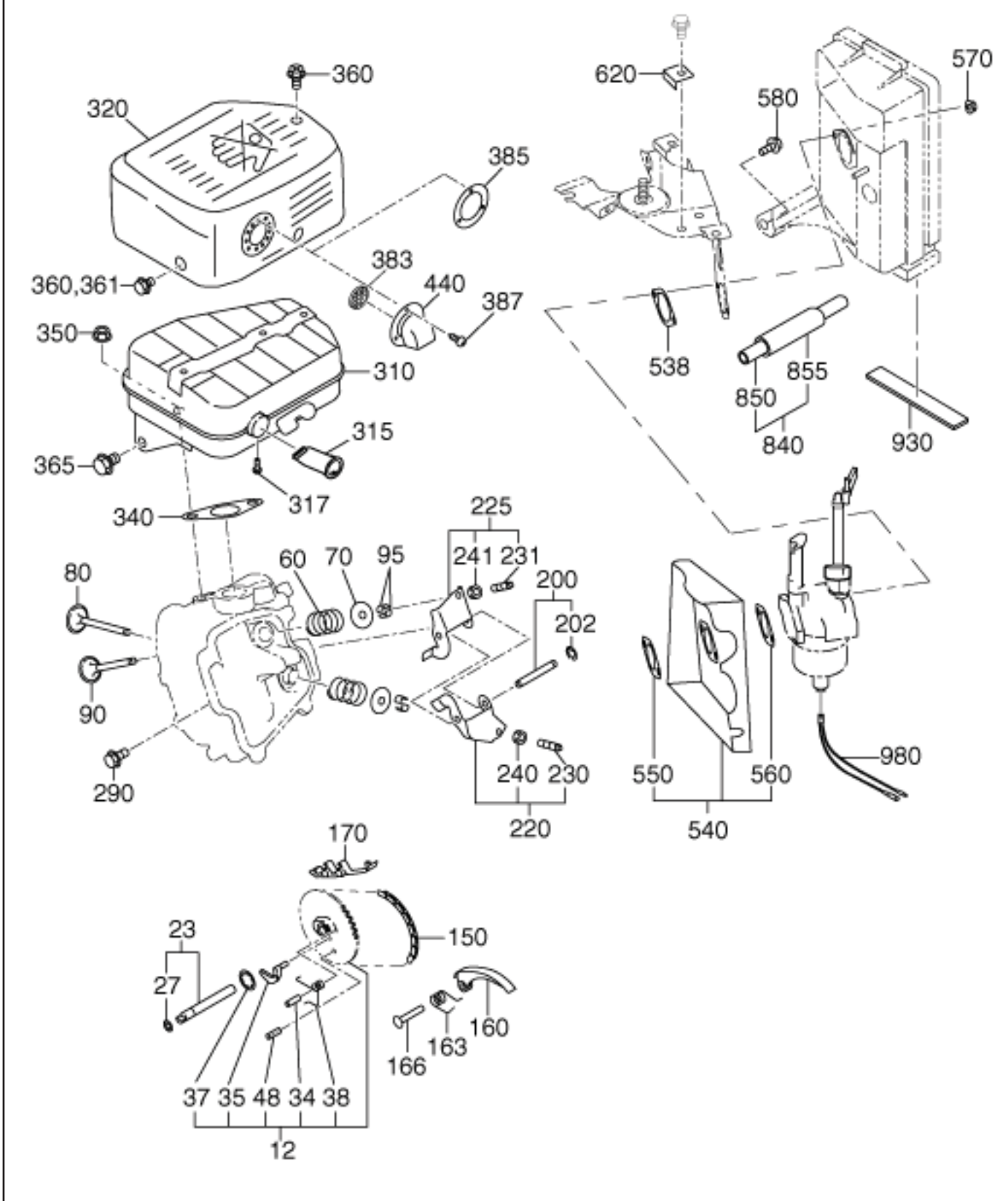


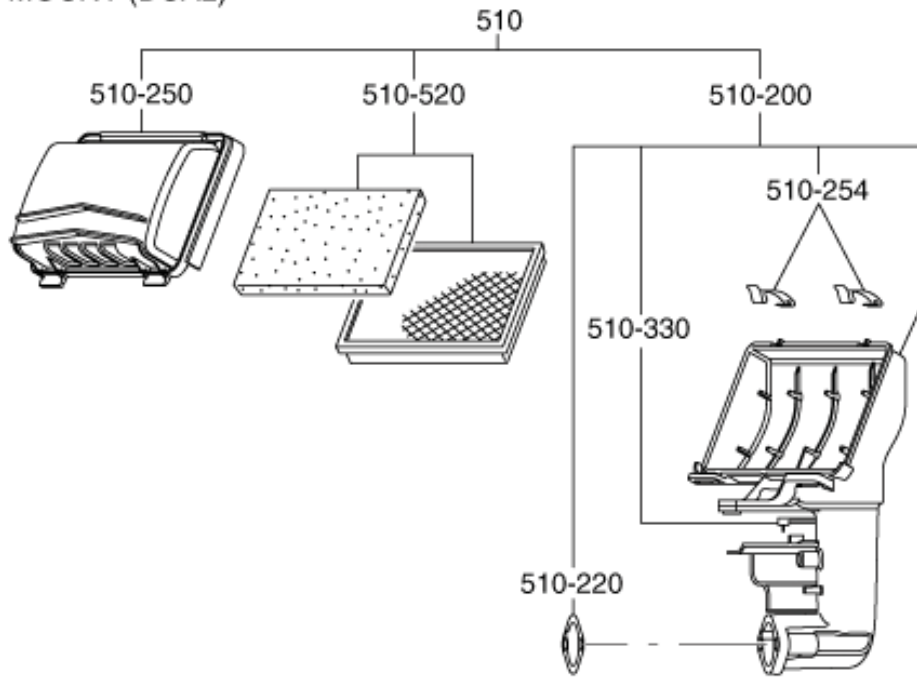
FIG. 3 INTAKE and EXHAUST GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
12	20B-31601-20	CAMSHAFT AY	1		-	300
23	20B-35101-21	PIN(CAM SHAFT)CP	1		-	300
27	024-00700-21	O-RING	1		-	300
34	005-19041-00	SPRING PIN	1	4.4DX10LX0.8T	-	300
35	277-36401-13	RELEASE LEVER	1		-	300
37	20B-36501-03	CLIP	1		-	300
38	277-38702-03	RETURN SPRING	1	5.1DX0.6DX4.4L N=7	-	300
48	031-80500-20	ROLL PIN	1		-	300
60	246-33611-03	VALVE SPRING	2	22.2DX2.9DX37L N=6.5	-	300
70	246-33711-13	SPRING RETAINER	2	7.6DX26DX8T	-	300
80	20B-33402-H3	INTAKE VALVE	1		9227-	300
	20B-33401-H3	INTAKE VALVE	1		-9226	300
90	20B-33502-H3	EXHAUST VALVE	1		9227-	300
	20B-33501-H3	EXHAUST VALVE	1		-9226	300
95	246-35501-03	COLLET-VALVE	4		-	300
150	20B-35601-H1	TIMING CHAIN CP	1		-	300
160	277-36911-03	TENTIONER	1		-	300
163	277-37101-03	SPRING(TENTIONER)	1	10DX1.8DX14L N=4.5	-	300
166	277-36902-03	PIN(TENTIONER)	1	6DX13DX34L	-	300
170	277-36913-13	CHAIN GUIDE	1		-	300
200	20B-35001-01	PIN(ROCKER)CP	1		-	300
202	003-13060-00	CLIP	1	6DX12DX0.8T	-	300
220	20B-36101-00	ROCKER ARM(IN) AY	1		-	300
225	20B-36102-10	ROCKER ARM(EX) AY	1		-	300
230	014-90500-20	ADJUST SCREW	1	M5X0.5X23L	-	300
231	014-90500-20	ADJUST SCREW	1	M5X0.5X23L	-	300
240	017-00500-30	NUT	1	M5X0.5X4.1H	-	300
241	017-00500-30	NUT	1	M5X0.5X4.1H	-	300
290	011-00600-10	FLANGE BOLT	1	M6X1.0X14DX8L	-	300
310	20B-30111-J2	MUFFLER UN	1		-	300
315	267-37602-01	SPARK ARRESTER CP	1		-	300
317	015-00400-60	TAPPING SCREW	1	M4X6L	-	300
320	20B-34201-11	MUFFLER COVER CP	1		-	300
340	20B-35201-13	GASKET(MUFFLER)	1	T=0.2	-	300
350	002-38080-00	FLANGE NUT	2	M8X1.25X17DX7.5H	-	300
360	011-00600-10	FLANGE BOLT	5	M6X1.0X14DX8L	-	300
365	011-00803-20	FLANGE BOLT	1	M8X1.25X16DX12L	-	300
385	267-37101-12	TAIL SCREEN UN	1		-	300
387	015-00400-60	TAPPING SCREW	3	M4X6L	-	300
538	20B-35903-13	GASKET 3	1	T=0.5	-	300
540	20B-32901-K1	INSULATOR CP	1		-	300
550	20B-35902-H3	GASKET 2	1	T=0.5	-	300
560	20B-35901-H3	GASKET 1	1	T=0.5	-	300
570	002-38060-00	FLANGE NUT	2	M6X1.0X13DX6H	-	300
580	001-04061-60	FLANGE BOLT	1	M6X1.0X13DX16L	-	300
620	20B-57101-03	COVER STAY(A/C)	1		-	300
850	X85-11001-70	RUBBER PIPE	1	10DX15DX170I	-	300

FIG. 3 INTAKE and EXHAUST GROUP

FIG. 315

HI MOUNT (DUAL)



HI MOUNT (PRE CYCLONE)

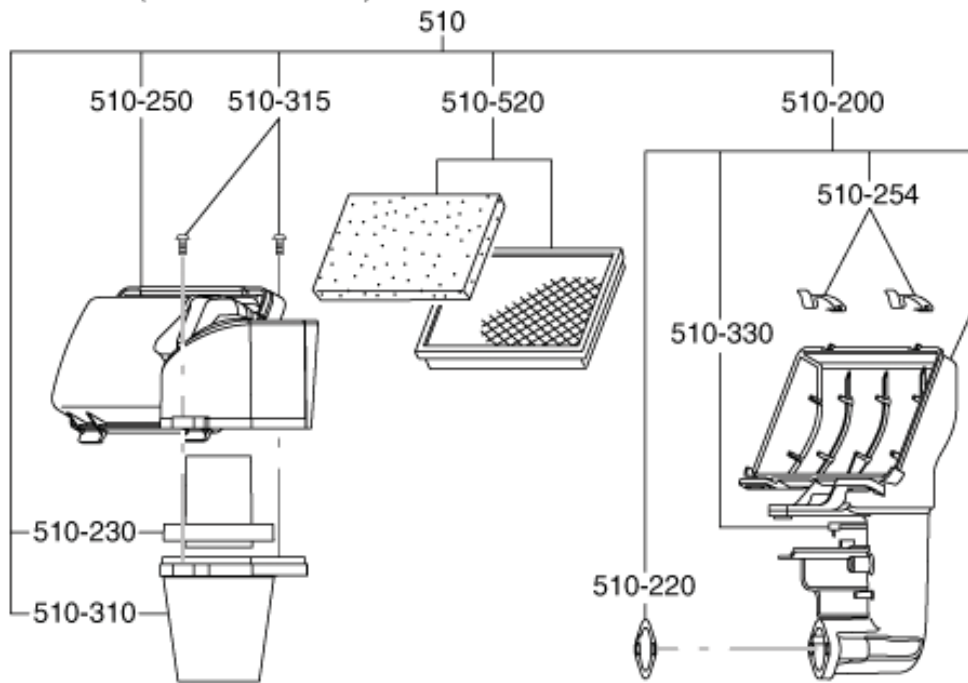


FIG. 3 INTAKE and EXHAUST GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
510	20B-32651-J0	AIR CLEANER AY	1	HI-MOUNT(DUAL)	-	317
-200	20B-32636-H8	BODY CP	1		-	317
-220	20B-32720-H8	PACKING	1		-	317
-250	20B-32641-J8	COVER	1		-	317
-254	20B-32680-H8	CLIP 1	2		-	317
-330	20B-43801-H1	CHOKE LEVER CP	1		-	317
-520	20B-32610-J7	ELEMENT AY	1		-	317

FIG. 4 GOVERNOR GROUP

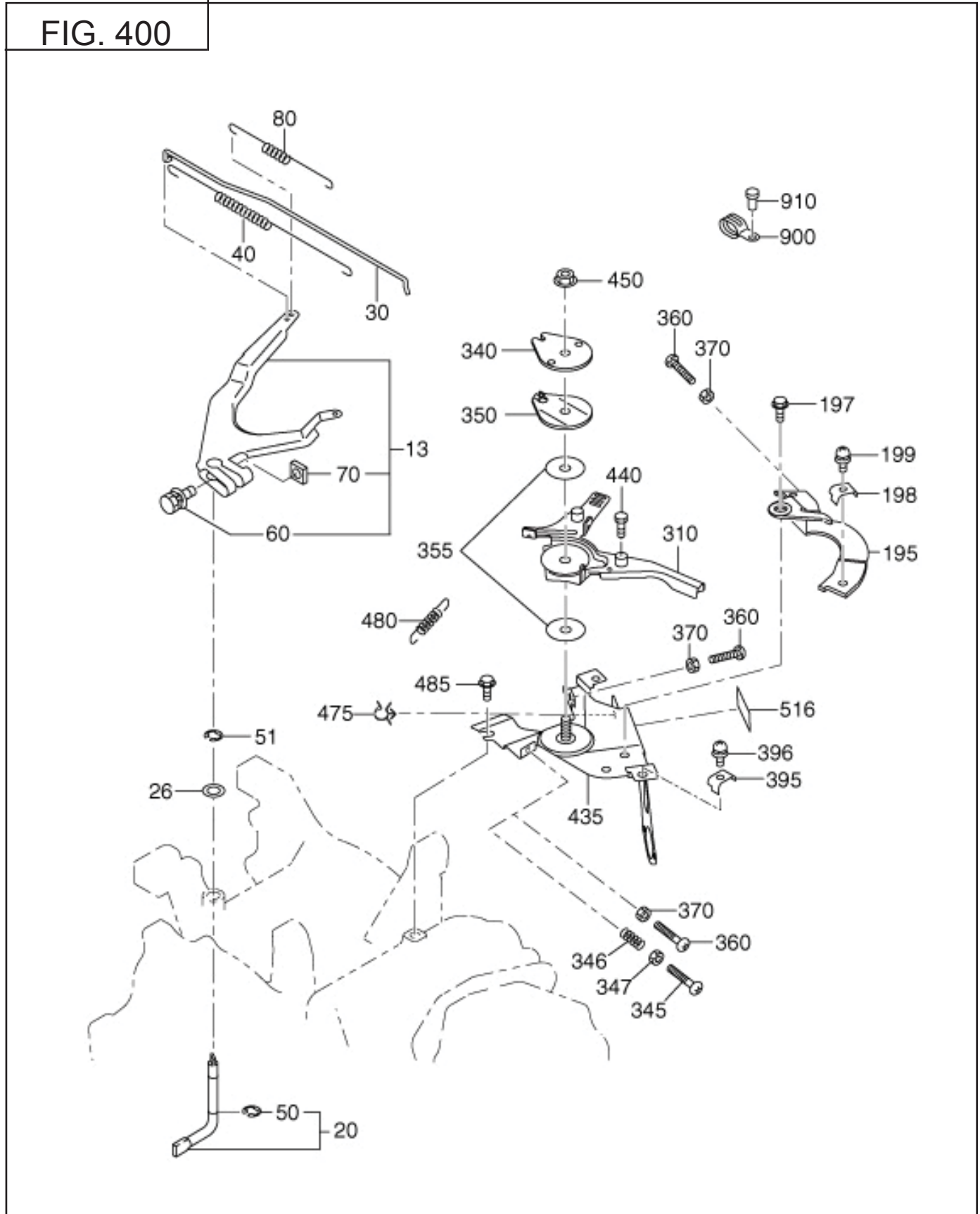


FIG. 4 GOVERNOR GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
13	20B-42301-20	GOVERNOR LEVER AY	1		-	400
20	20B-42201-01	GOVERNOR SHAFT CP	1		-	400
26	003-11080-00	WASHER	1	8.5DX18DX1.6T	-	400
30	20B-42701-23	GOVERNOR ROD	1		-	400
40	20B-42801-13	ROD SPRING	1		-	400
50	003-13060-00	CLIP	1	6DX12DX0.8T	-	400
51	003-13060-00	CLIP	1	6DX12DX0.8T	-	400
60	001-14062-50	BOLT AND WASHER AY	1	M6X1.0X25L W/W,SW	-	400
70	018-60600-20	NUT	1	M6X1.0X4.9H SQUARE	-	400
80	20B-42501-13	GOVERNOR SPRING	1		-	400
310	20B-43301-03	SPEED CONTROL LEVER	1		9263-	400
	20B-43301-01	SPEED CONT. LEVER CP	1		-9262	400
340	227-43501-13	STOP PLATE	1		-	400
350	227-45002-03	SPRING WASHER	1	T=0.4	-	400
355	021-70600-30	FRICTION WASHER	2	6.5DX33DX0.6T FIBER	-	400
360	004-31061-80	SCREW	1	M6X1.0X18L	-	400
370	002-27060-00	NUT	1	M6X1.0X3.6H	-	400
395	277-43902-03	CLAMP	1		-9263	400
396	013-10500-30	SCREW AND WASHER AY	1	M5X0.8X20L W/W,SW	-9263	400
435	20B-46001-21	SPEED CONTROL BKT CP	1		-	400
440	004-31040-80	SCREW	1	M4X0.7X8L	-9263	400
450	002-35060-00	SELF LOCK NUT	1	M6X1.0X6.8H	-	400
480	277-45103-03	RETURN SPRING	1	7DX0.7DX28L N=15	-9263	400
485	011-00600-20	FLANGE BOLT	1	M6X1.0X14DX12L	-	400
516	277-96107-03	LABEL(HI-LOW)	1		-	400

FIG. 5 COOLING and STARTING GROUP

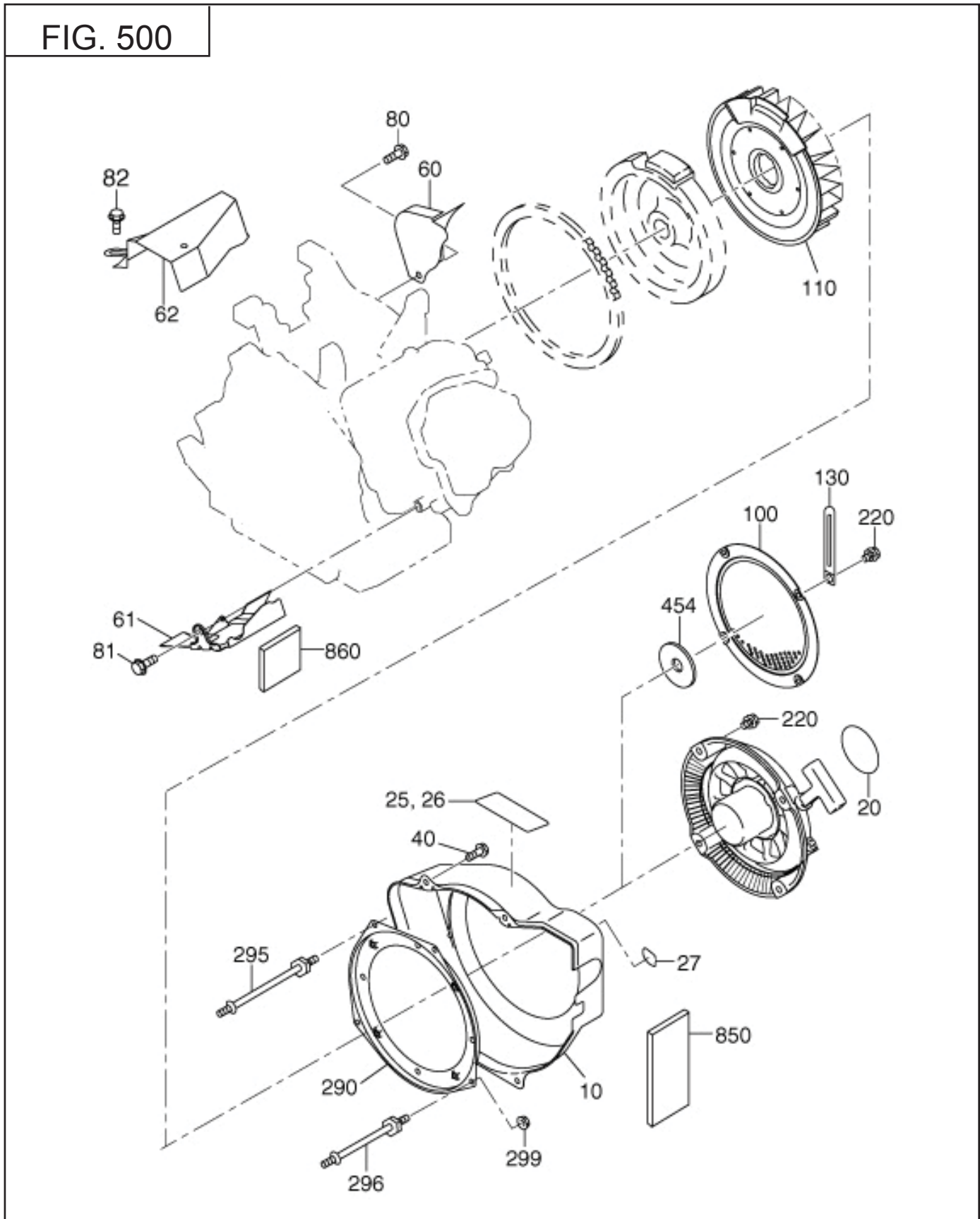


FIG. 5 COOLING and STARTING GROUP

FIG. 520

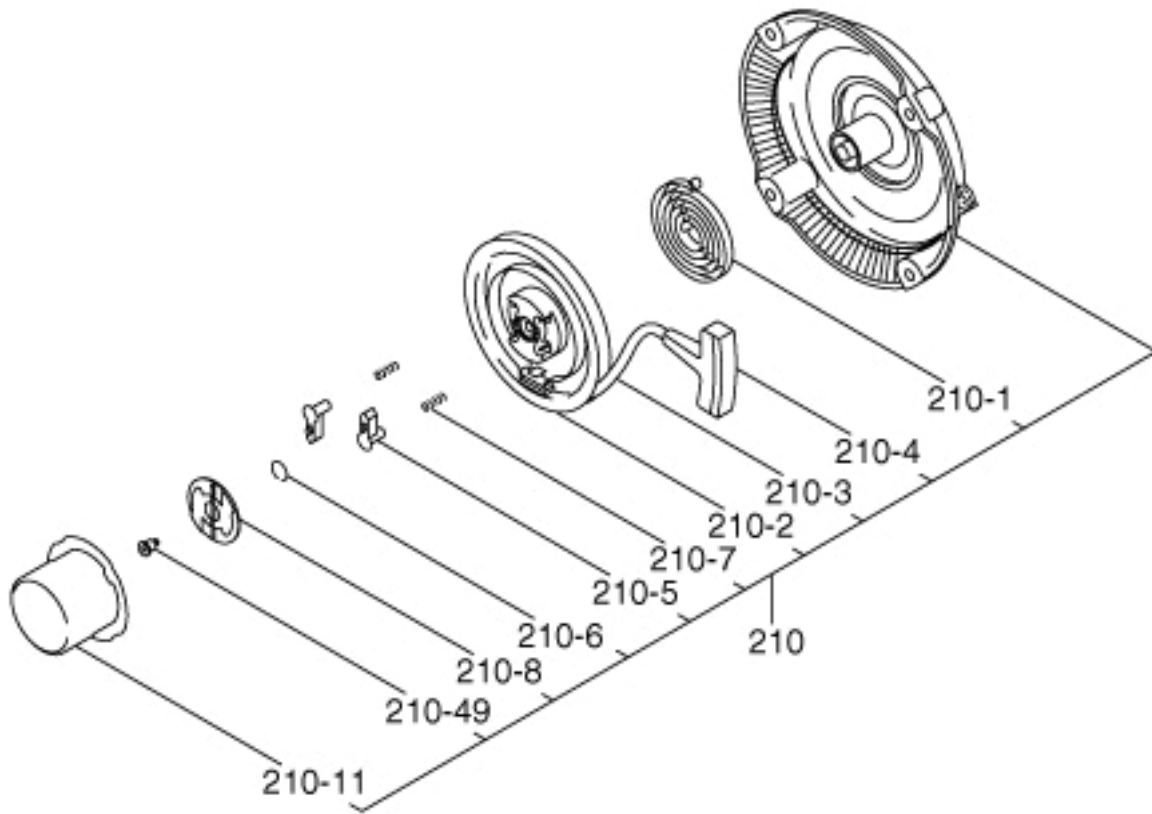


FIG. 6 FUEL LUBRICANT GROUP

FIG. 600

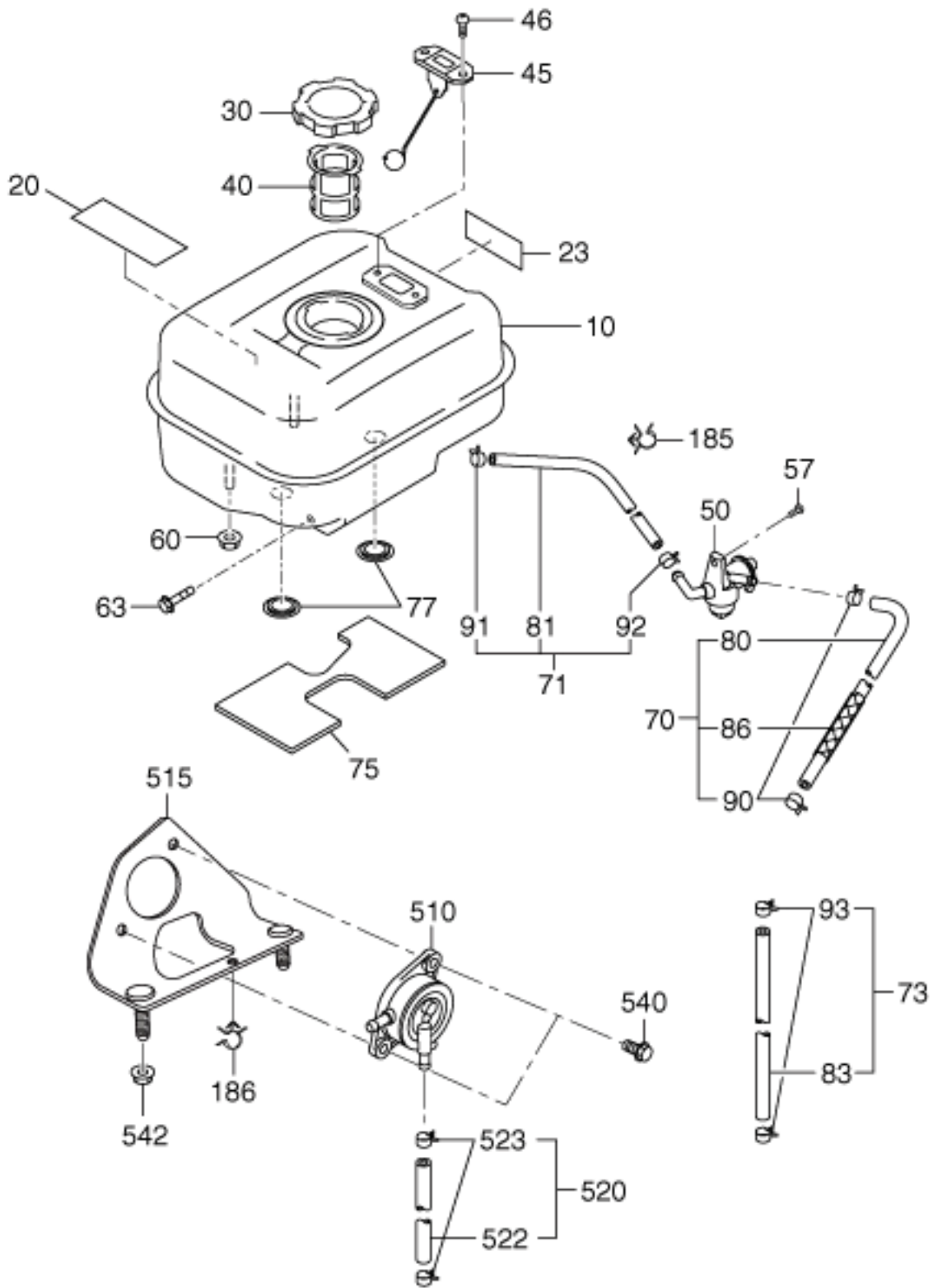


FIG. 6 FUEL LUBRICANT GROUP

FIG. 640

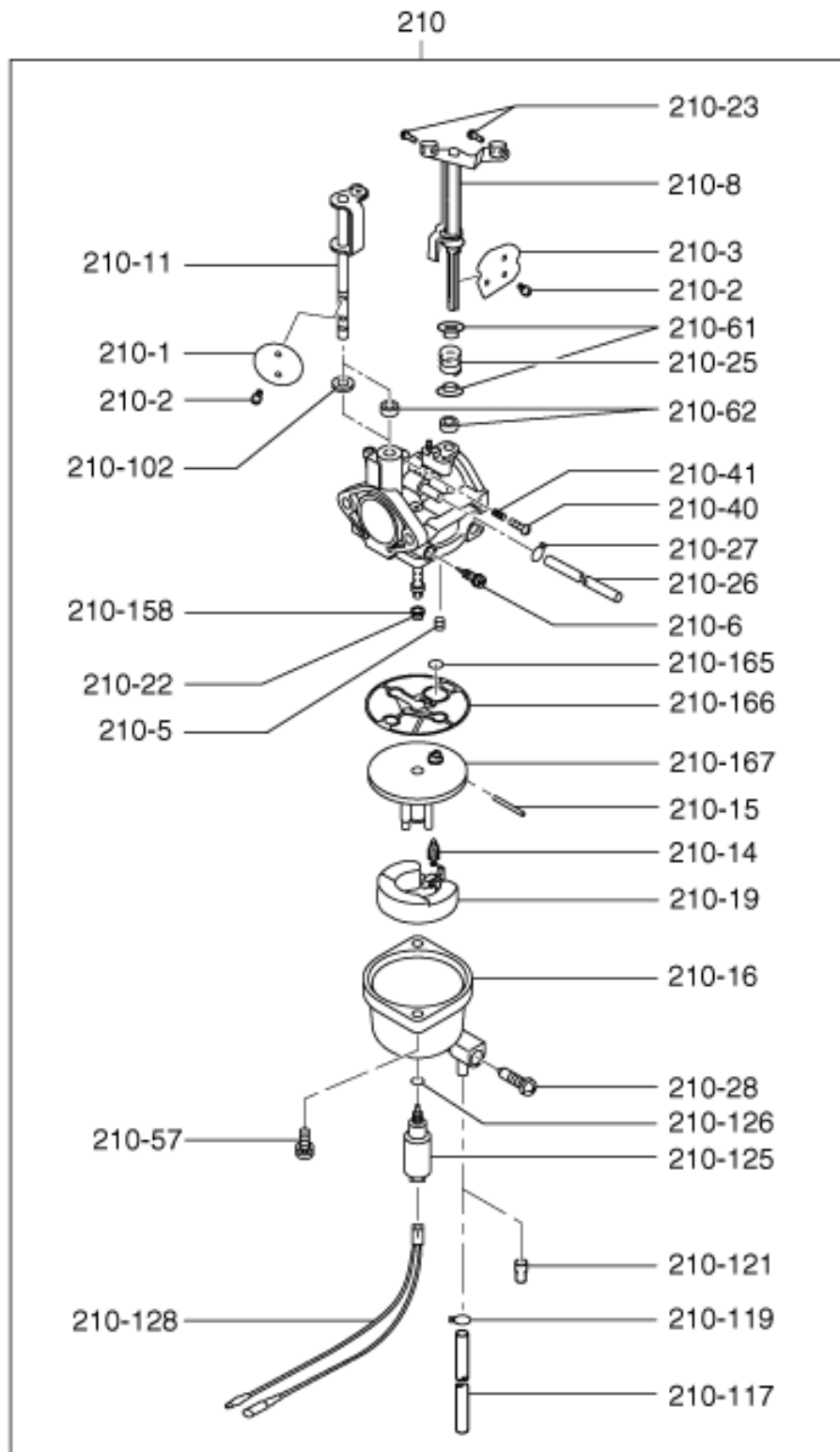


FIG. 7 ELECTRIC GROUP

FIG. 700

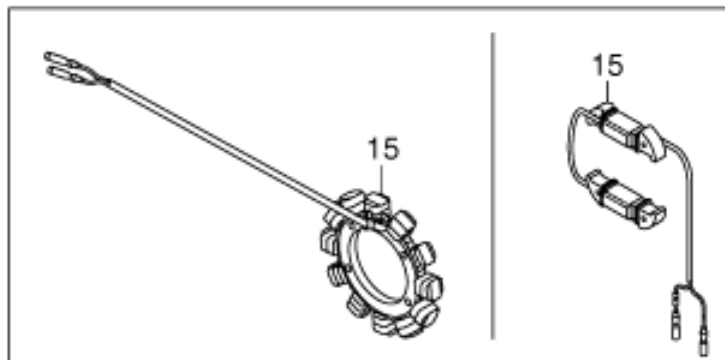
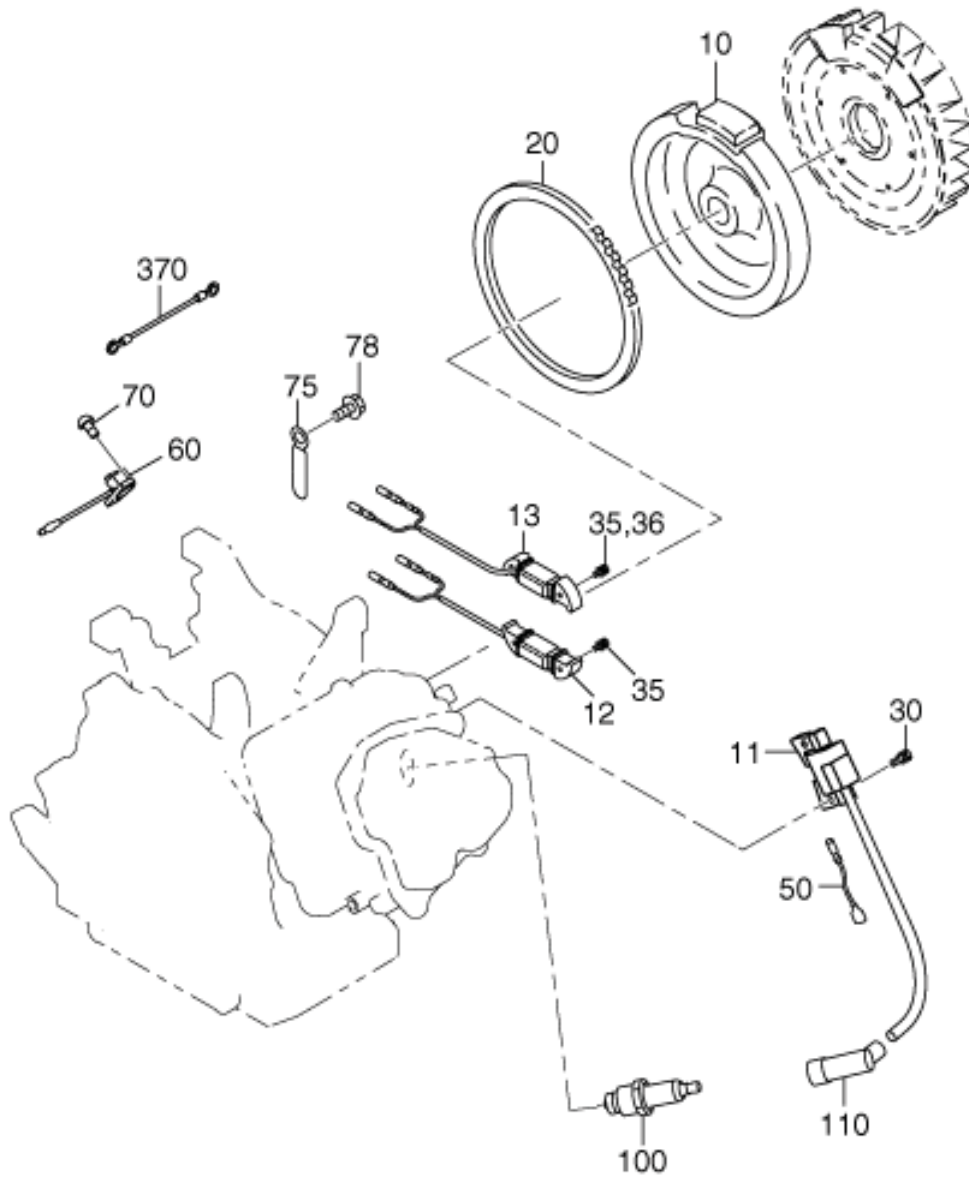


FIG. 7 ELECTRIC GROUP

FIG. 770

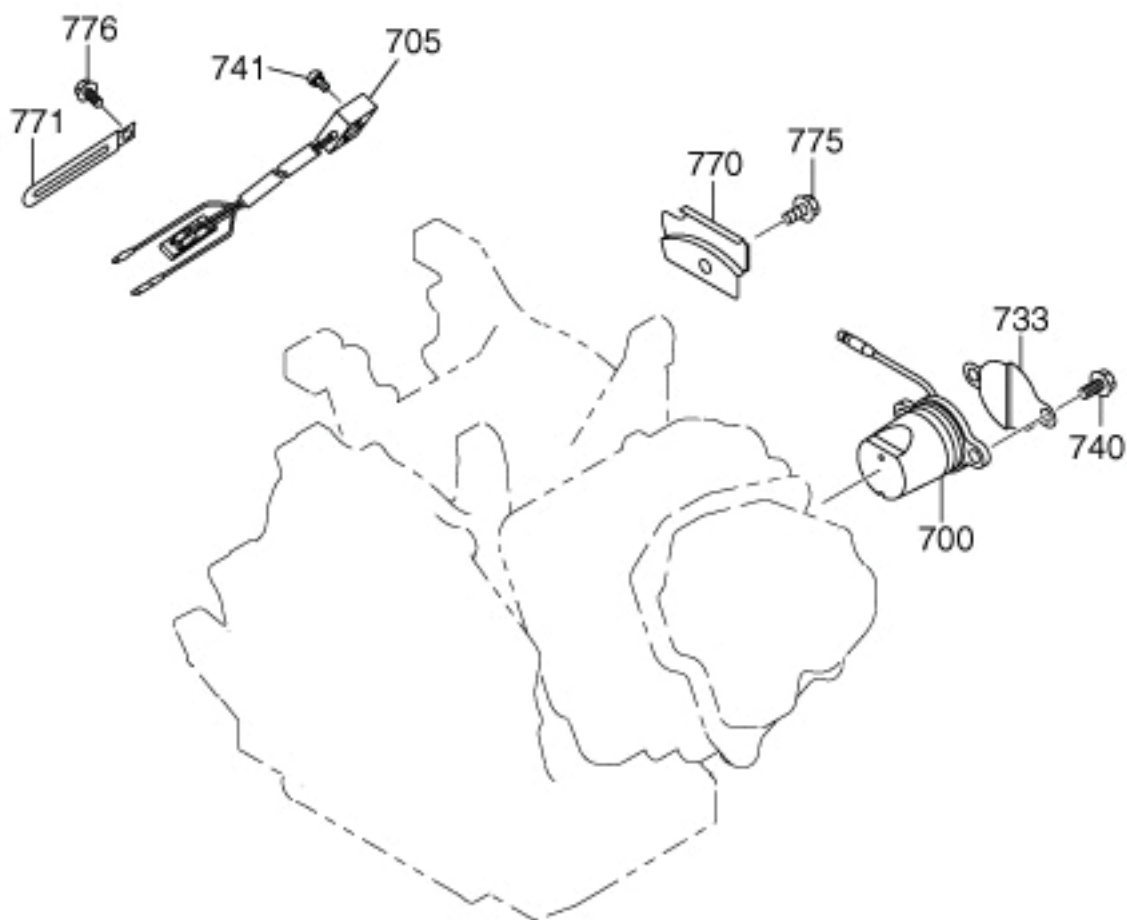


FIG. 42 PUMP GROUP

FIG. 4200

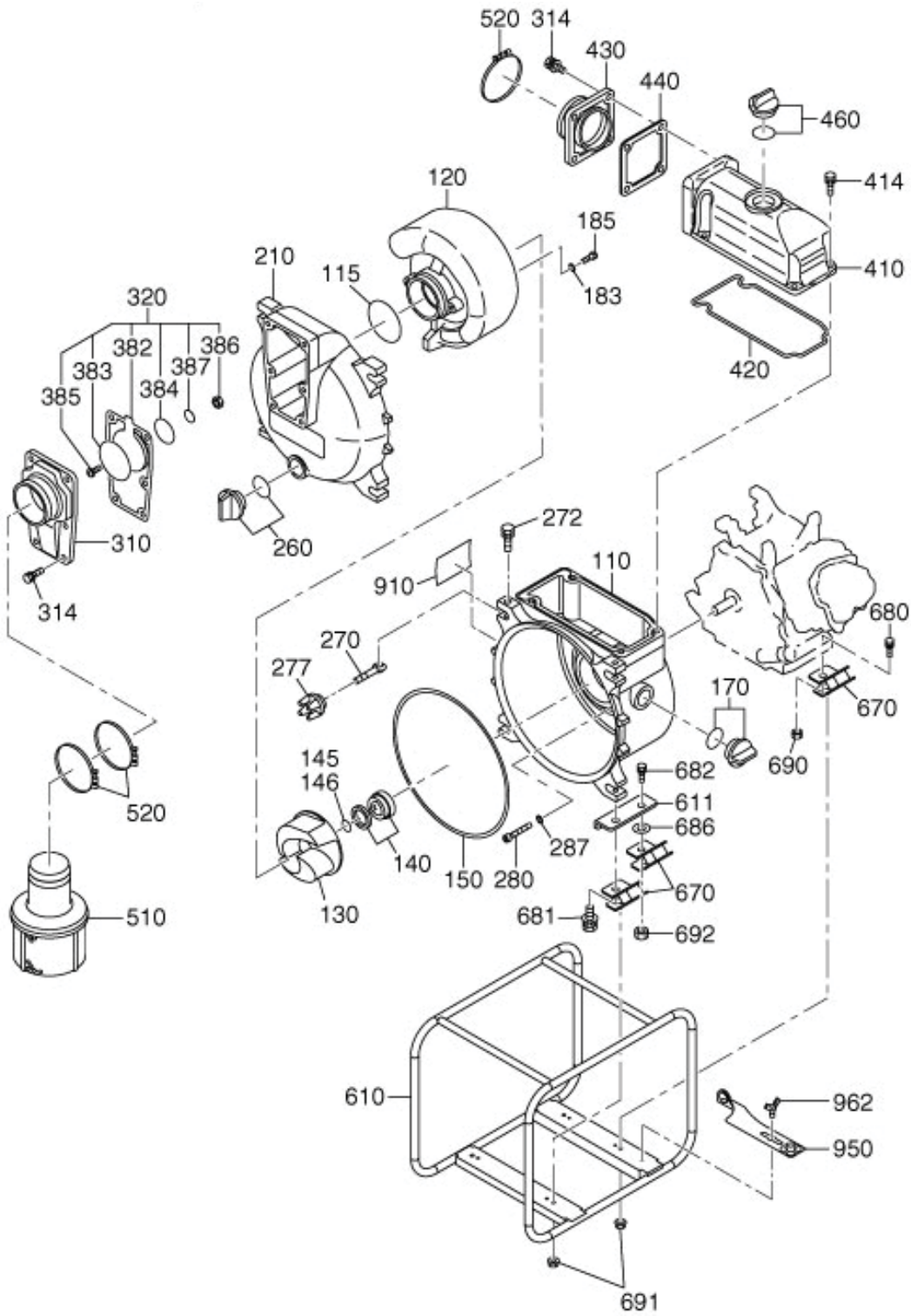
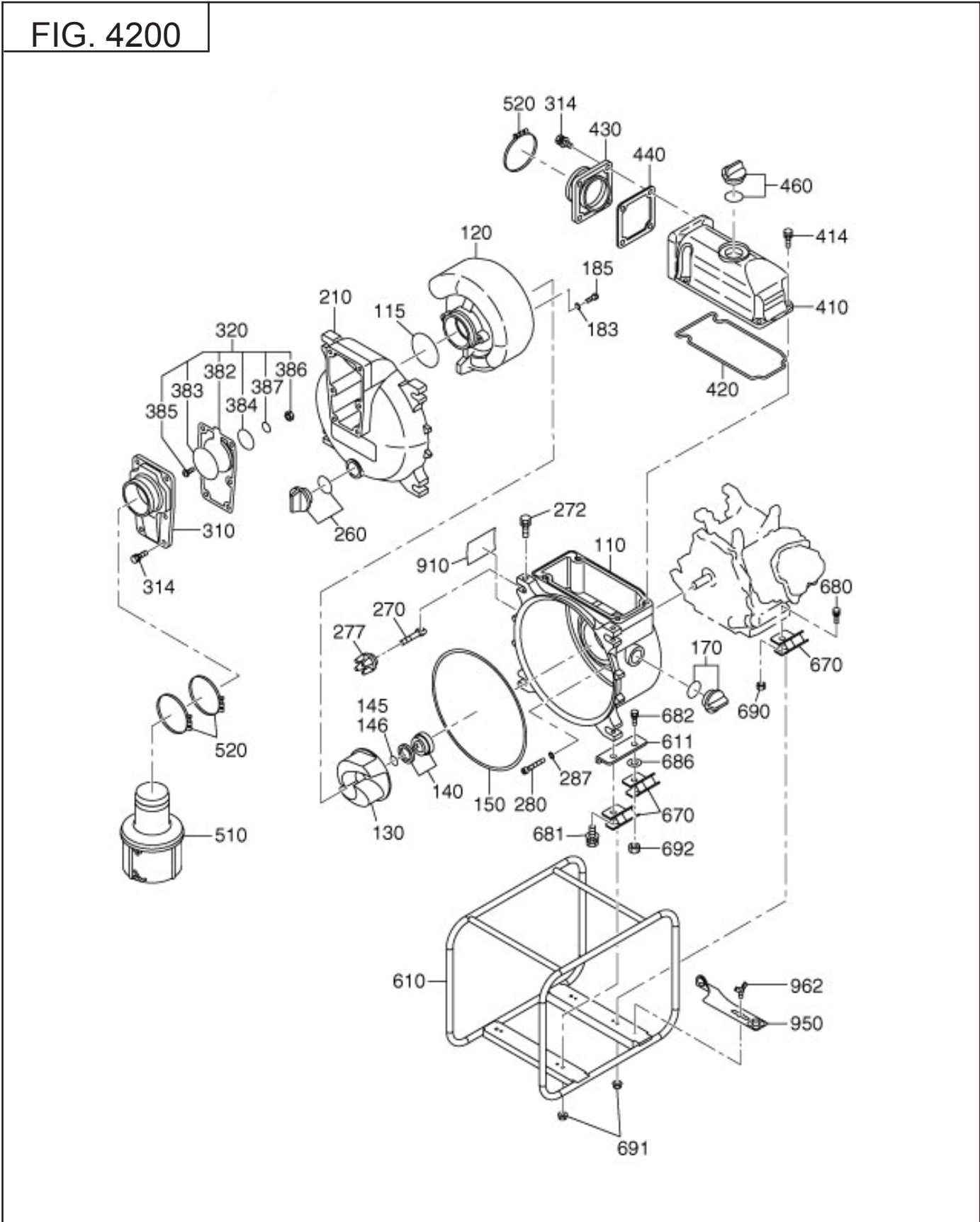


FIG. 42 PUMP GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
110	470-01218-90	CASING	1		-	4200
115	470-01162-70	O RING	1		-	4200
120	470-01164-88	INNER CASING	1		-	4200
130	470-01156-26	IMPELLER	1		-	4200
140	470-01156-78	MECHANICAL SEAL	1		-	4200
145	470-01105-61	ADJUSTING WASHER	2		-	4200
146	470-01164-05	ADJUSTING WASHER	2		-	4200
150	470-01155-79	FRONT COVER PACKING	1		-	4200
170	470-01180-79	PLUG AY	1		-	4200
183	470-01215-40	WASHER	3		-	4200
185	470-01215-39	SOCKET BOLT	3		-	4200
210	470-01166-12	FRONT COVER	1		-	4200
260	470-01180-79	PLUG AY	1		-	4200
270	470-01155-80	COVER BOLT	4		-	4200
272	471-00000-73	BOLT & WASHER AY	2	M12X45L	-	4200
277	470-01155-90	KNOB	4		-	4200
280	470-01164-92	SOCKET BOLT	4		-	4200
287	470-01164-93	WASHER	4	8D	-	4200
310	470-01115-79	SUCTION FRANGE	1		-	4200
314	471-00000-42	BOLT & WASHER AY	10		-	4200
320	470-01182-61	CHECK VALVE SET	1		-	4200
382	470-01107-51	PACKING,CHECK VALVE	1		-	4200
383	470-01112-16	OUTER WEIGHT	1		-	4200
384	470-01104-74	INNER WEIGHT	1		-	4200
385	471-00000-83	SCREW	1		-	4200
386	471-00000-57	NUT	1	M8	-	4200
387	471-00000-68	SPRING WASHER	1	8D	-	4200
410	470-01161-48	DELIVERY HOUSING	1		-	4200
414	471-00000-34	BOLT & WASHER AY	4	M10X30L	-	4200
420	470-01155-48	HEAD PACKING	1		-	4200
430	470-01129-96	DELIVERY FLANGE	1		-	4200
440	470-01107-50	DELIVERY FLANGE PACK	1		-	4200
460	470-01184-50	PLUG AY	1		-	4200
510	470-01109-79	STRAINER	1		-	4200
520	471-00000-48	HOSE BAND	3		-	4200
610	470-01284-51	FRAME	1		-	4200
611	470-01162-73	RUBBER MOUNT	2		-	4200
670	470-01161-72	CUSHION RUBBER	6		-	4200
680	471-00000-36	BOLT & WASHER AY	2		-	4200
681	471-00000-81	BOLT & WASHER AY	2		-	4200
682	471-00000-33	BOLT & WASHER AY	2		-	4200
686	471-00000-82	WASHER	2		-	4200
690	471-00000-38	NUT	2	M10	-	4200
691	471-00000-76	NUT	6	M8	-	4200
692	471-00000-45	NUT	2	M12	-	4200
910	470-01219-01	LABEL(PUMP NAME)	1		-	4200

FIG. 42 PUMP GROUP



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